### 2005 Bridge Construction Project Summary

The following summarizes construction activities on City (DOTE) and County bridges that occurred in 2005 or will occur in 2006. Except as noted, DOTE staff performed plan development and construction management for these bridge projects.

### 2005 City (DOTE) Bridge Construction Projects

Broadway Pedestrian Plaza Overhead at U.S. Bank Arena and Great American Ballpark - Miscellaneous Repairs (City Bridge in the Central Riverfront District)

This project consisted of removing and replacing the existing expansion joints and cleaning and recoating the existing waterproofing membrane on the walking surfaces. Also, the existing precast concrete panels were sealed and portions of the structural steel were repainted. The covers of the existing deck drains were replaced and anti-bird spikes were installed at various locations. The project will extend the life of the existing bridge, help remove the pigeon nuisance, and make the bridge's appearance more harmonious with the adjacent Great American Ballpark. Construction began in early spring of 2005 and was completed in October of 2005. The accepted contract bid price for the project was \$677,330 and was financed using both City operating funds and City CIP bridge funds.

# Central Parkway over Rapid Transit Tubes, Walnut to Draper – Wall Opening Grating Replacement (City Bridge in Camp Washington)

This project consisted of removing and replacing a deteriorated grating that covers one of the wall ventilation openings in the exterior wall of the Rapid Transit Tubes. The replacement grating was installed in the spring of 2005 to prevent unauthorized personnel from accessing the abandoned subway tubes. The accepted contract bid price was \$12,050 and was financed using City CIP bridge funds.

### Celestial Street Pedestrian Bridge over Columbia Parkway – Bridge Repairs (City Bridge in Mt. Adams)

This project consisted of making concrete and drainage repairs, and sealing concrete surfaces to help preserve and extend the useful life of this landmark structure. The project also included the installation of new, vandal protection fencing that was decorative, yet satisfied Ohio Department of Transportation (ODOT) standards. The work was performed during the summer of 2005 as a part of the ODOT, Columbia Parkway Bridge West of Martin Drive, bridge replacement project. The City contributed \$74,250 to the project to fund the additional costs to improve the appearance of the fencing. These improvement costs were financed from City CIP Columbia Parkway Improvements, Celestial to Bains funds.

# Second Street over Transit Center, East End – Deck Sealing (City Bridge in Central Riverfront District)

This project consisted of sealing the bridge deck with gravity feed resin to seal cracks and prolong the life of the bridge. The work was performed during the fall of 2005 as part of Fort Washington Way Contract #28. The accepted contract bid price for this work was \$56,700 and was financed using both City operating funds and City CIP bridge funds.

### Second Street over Transit Center – Joint Repairs (City Bridge in Central Riverfront District)

This project consists of upgrading the bridge expansion joints over the Transit Center to prevent leakage into the Transit Center. The work is being performed as part of Fort Washington Way Contract #28 which is currently in progress. The accepted contract bid price for this work was \$262,000 and is being financed with both City operating funds and City CIP bridge funds.

## Elm & Main Street Cable Stayed Pedestrian Bridges – Bolted Connection Repairs (City Bridges over Fort Washington Way)

This project consists of tightening loose bolted connections and performing repairs to prevent future loosening. The work is being performed as part of Fort Washington Way Contract #28 which is currently in progress. The accepted contract bid price for this work was \$25,872 and is being financed with both City operating funds and City CIP bridge funds.

### City Bridge Railing Repairs (Various City Bridges)

This project consists of making repairs to pedestrian railing, handrails and approach guardrail to the Central Incinerator Approach Bridge over the Mill Creek, the Dreman Avenue and Powers Street Bridges over the West Fork Channel, the Elm Street Bridge over Pete Roseway and Parking Lots, and the Hutton Street Pedestrian Bridge over Conrail. The accepted contract bid price for the project was \$49,219 and is being financed with City CIP bridge funds. Construction is currently in progress.

# Waldvogel Viaduct Structural Repairs Contract (City Bridge in Lower Price Hill) This project consists of cleaning, repairing and painting structural steel members, repairing deteriorated sections of the wearing surface and sidewalks on the bridge, replacing damaged or nonfunctioning drainage members and making other repairs to the Viaduct in order to keep the Viaduct operational until it can be replaced. Construction is expected to begin in spring of 2006. City operating funds and City CIP bridge funds will be used to finance this project. Additional information on the replacement project can be found in the Major Bridge Projects section of this report.

## Freeman Avenue Bridge over Sixth Street Expressway, In-Depth Inspection and Repairs (City Bridge in Queensgate)

The condition rating on the Freeman Avenue Bridge over the Sixth Street Expressway was lowered during this inspection cycle from a 7 (Good Condition) to 4 (Poor Condition) due to the discovery of fatigue cracks at some weld locations. An in-depth inspection of all visible welds was made over the winter of 2006. City CIP bridge funds were used to finance the in-depth inspection. It appears ODOT is willing to fund the repairs. Plans are being prepared by a consultant selected by ODOT. Repairs are scheduled for fall, 2006. Cleaning and sealing the bridge deck is also included in the project.

#### 2005 County Bridge Construction Projects

# Kennedy Avenue Bridge over SORTA Security Fencing (County Bridge in Kennedy Heights)

Due to a request from the Kennedy Heights C.P.O.P. community group, plans were developed to remove trash and rubbish from under the bridge and to install fencing to prevent future dumping and reported drug activity. The work began in April and was completed in May of 2005. The accepted contract bid price for the project was \$28,700 and was financed using County MRF bridge funds.

## Galbraith Road Bridge over Anthony Wayne Avenue and Conrail - Railing Painting and Miscellaneous Repairs (County Bridge in Hartwell)

This project consisted of cleaning and repainting the existing steel bridge railings in response to a priority request from the local community council. The existing concrete walks and curbs were also repaired as a part of this contract. Work started in June and was completed in October of 2005. Traffic was maintained both on and under the bridge during construction. The accepted contract bid price for the project was \$194,293 and was financed using County MRF bridge funds.

### **Columbia Parkway Bridge West of Martin Drive - Bridge Replacement** (County Bridge in Mt. Adams)

Plans for this project were prepared by a consultant selected by ODOT. This two year long construction project, which was administered by ODOT, was completed in October of 2005. The City contributed \$404,780 to the accepted contract bid price of \$6,135,774 to fund roadway, drainage, pavement, lighting, traffic control, landscaping and improvement to railing items that ODOT would not fund. The remaining cost of the project was financed by ODOT. The City portion of this project was financed with City CIP Columbia Parkway Improvements, Celestial to Bains funds.

**Eighth Street Viaduct Shoring** (County Bridge in Queensgate and Lower Price Hill) Due to continued deterioration of the split piers located under the expansion joints, the Viaduct's condition rating was lowered from a 4 (Poor condition) to a 3 (Serious condition) during the previous inspection cycle. Shoring plans for the three piers in the worst condition were prepared by a consultant under DOTE's direction. The shoring is needed to maintain the Viaduct in a safe condition until the partial reconstruction project occurs. Additional information on the partial reconstruction project can be found in the Major Bridge Projects section of this report. Installation of the shoring was completed in December of 2005. Traffic on the viaduct was not affected by the work. The accepted contract bid price for the project was \$413,333 and was financed using County MRF bridge funds.

# Montgomery Road Arch – Railing Repair (County Bridge in Pleasant Ridge) This project consists of making repairs to the concrete railing and sidewalk that are deteriorated due to their age and were further damaged by vehicle impact. The accepted contract bid price for this work was \$45,022 and is being financed with County MRF bridge funds. Construction was completed in early 2006 and did not significantly impact traffic.

Western Hills Viaduct Safety Improvements (County Bridge in South Fairmont) This project consists of removing and replacing guardrail treatments that no longer meet current design criteria at the west end of the Western Hills Viaduct. Work is expected to take place in the spring, 2006 and will be financed using County MRF bridge funds.

County Bridge Maintenance Contract (County Bridge in Camp Washington/Queensgate) This project consists of installing supplemental supports under two deteriorated beams of the Western Hills Viaduct as well as removing and replacing the expansion joints on the ramps to and from southbound I-75. The ramps will have to be closed to traffic for 2 to 3 weeks to perform this work. Also, the lower deck of the Western Hills Viaduct will be ground and resurfaced and deteriorated portions of steel beams will be cleaned and painted. Work is expected to begin in the spring, 2006 and will be financed using County MRF bridge funds.

### Norwood Lateral Bridge over Paddock Road Norwood Lateral Bridge over Reading Road

(County Bridges in Bond Hill)

This ODOT design build project will resurface the entire length of the Norwood Lateral. Roadway sections of the project will be resurfaced with asphalt while the bridge sections, including the bridges over Paddock Road and Reading Road, will be overlayed with new concrete wearing surfaces. The project also includes sealing concrete surfaces on both bridges and replacing the expansion joint glands on the Paddock Road Bridge. Construction will begin in the spring of 2006 and be completed in late fall of 2006. Work will be performed mostly during nights and weekends to minimize traffic impacts. It is expected that all work on this project will be financed by ODOT.

Sixth Street Expressway East Bound over Mill Creek and Railroads

Sixth Street Expressway West Bound over Mill Creek and Railroads

Sixth Street Expressway East Bound over Harriett Street

Sixth Street Expressway West Bound over Harriett Street

Sixth Street Expressway East Bound over Private Drive West of Freeman

Sixth Street Expressway West Bound over Private Drive West of Freeman

Sixth Street Expressway East Bound over Linn Street and Railroad

Sixth Street Expressway West Bound over Linn Street and Railroad

Sixth Street Expressway East Bound over Gest Street

Sixth Street Expressway West Bound over Gest Street

(County Bridges in Queensgate)

ODOT expects to perform numerous, sundry repairs to these structures during the summer and fall of 2006. Work will include: placing asphalt deck overlays, cleaning bridge drainage systems, repairing bridge pressure relief joints, making weld inspections and repairs and sealing bridge decks with gravity feed resin. It is expected that all work on this project will be financed by ODOT.